



State of Washington  
**DEPARTMENT OF FISH AND WILDLIFE**

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Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

June 10, 2003

Mr. Michael Collins  
HSW EIS Document Manager  
U.S. Department of Energy  
P.O. Box 550, MSIN A6-38  
Richland, Washington 99352

Dear Mr. Collins:

**SUBJECT: REVISED DRAFT HANFORD SITE SOLID (RADIOACTIVE AND HAZARDOUS) WASTE PROGRAM ENVIRONMENTAL IMPACT STATEMENT (EIS)**

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The Washington Department of Fish and Wildlife (WDFW) has completed review of the Revised Draft Solid Waste EIS. The WDFW is providing comments on this EIS because of our responsibility to protect, preserve, perpetuate, and manage fish and wildlife resources in Washington State. The WDFW has significant fish and wildlife trustee resources associated with the Hanford site, and we are co-trustees with the Department of Ecology on the Hanford Trustee Council. Our comments are focused on the species and habitats potentially impacted by the proposed actions and the reluctance of Department of Energy's (DOE) commitment to assess impacts and to fully mitigate for these actions.

1

The Revised Draft EIS fails to adequately evaluate the impacts of proposed actions on state and federally listed species, candidate species, and species new to science. The state has 18 listed species of concern associated with shrub steppe habitat that are not evaluated within this document. This document continues to devalue the importance of The Nature Conservancy's (TNC) biological inventory on the Hanford site. DOE's response to our original comments on the first draft of the EIS indicates that TNC's work is cited extensively within the EIS. Yet, the EIS fails to take this information further, what are the impacts from actions proposed going to be on these species? As quoted in TNC's document *"From a conservation standpoint, the Hanford Site is a vital and perhaps the single most important link in preserving and sustaining the diverse plants and animals of the Columbia Basin Ecoregion"* (TNC 1998). The National Biological Division of the U.S. Geological Survey lists native shrub and grassland steppe in Washington and Oregon as Endangered because of an 85-98% decline (Noss et al. 1995).

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Affected Environment - 4.6 Biological and Ecological Resources

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Page 4.66. Please update the reptile discussion by adding the following reference: "Herpetofauna of the Hanford Nuclear Reservation, Grant, Franklin and Benton Counties, Washington" Lisa A.

L-0050 (contd)

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- 3 | Hallock, submitted to The Nature Conservancy. December 1998.
- 4 | Page 4.69, Table 4.12. WDFW disagrees with DOE's response to our comments on the pygmy rabbit. The pygmy rabbit should be included on this table. Central Hanford is being considered by both WDFW and USFWS as a possible re-introduction site.
- 5 | Page 4.70, Table 4.13. WDFW disagrees with DOE's response on the vaux's swift, and it should be included. The vaux's swift was included in TNC's inventory of bird species of conservation concern, and was documented on the Arid Lands Ecology Reserve.
- 6 | Page 4.71, paragraph 1. The statement "Washington State considers **pristine** shrub-steppe habitat as priority habitat.." This is an incorrect statement; please remove the word "pristine". All shrub steppe habitat, regardless of the condition, is considered by WDFW as a priority habitat.
- 7 | Page 4.74, Microbiotic Crust. WDFW appreciates the additional information on the potential impacts to microbiotic crust from the proposed actions. DOE should, to the extent possible, research microbiotic crust restoration, since it plays an important role in shrub steppe ecosystem functioning and in the success of mitigation projects at the Hanford site.
- 8 | Page 4.75 Biodiversity, second paragraph. This section contradicts the discussion in Appendix I. WDFW agrees with the comment on Page 4.75, "many places on the Hanford site are relatively free of non native species and are extensive enough to retain characteristics populations of shrub-steppe plants and animals that are absent or scarce in other areas. Because of its location, the site provides important connectivity with other undeveloped portions of the ecoregion." While page I.26, first paragraph, last sentence, states, "the 24 Command Fire removed most of the adjacent shrub-steppe, interrupting the connectivity of these areas with other undeveloped portions of the ecoregion".
- 9 | Page 4.74, Table 4.15 Birds of Conservation Concern should also include sage thrasher and grass-hopper sparrow (USFWS 2002). Additionally, an analysis of population trends using the Breeding Bird Survey (BBS) identified 8 shrub-steppe associated species that are declining in the interior Columbia River Basin (including Brewer's sparrow, lark sparrow, loggerhead shrike, and western meadowlark) (Saab and Rich 1997).
- Environmental Consequences – 5.5 Ecological Resources
- 10 | Page 5.75, first paragraph. According to our WDFW PHS Database, additional wildlife potentially impacted by disturbance to the 200 East and 200 West LLBG's includes loggerhead shrikes, burrowing owl and Swainson's hawk. The nesting season for ground nesting birds should be extended from March through August (Vander Hagen, pers. comm.).

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**11** | Page 5.75, second paragraph last sentence, indicates survey's for rare plants were performed during the summer field survey of 2002. Rare plants of the Columbia Basin are not identifiable in late July and early August. The best time of the year to survey for rare plants in the Central Hanford area is during the month of May (Caplow, pers. comm.).

**12** | Page 5.75, forth paragraph, states "removal of sagebrush within the new HSW disposal facility near the PUREX Plant would likely have a small impact on populations of these species within the Columbia Basin". The first paragraph, same page states, "ground disturbance during the nesting season... could destroy eggs and young and temporary displace nesting individuals into other areas of the Hanford site". If an adequate cumulative impacts analysis on shrub steppe habitat and species on Central Hanford was completed, it would help answer the following question: What other areas of "suitable habitat" would birds utilize?

**13** | Page 5.76, last paragraph, impacts to elk from the Area C construction. Construction activity would be most disruptive to the elk herd during the wintertime, a period when the elk are most commonly found near the pit. WDFW recommends that blasting and other heavy construction activity take place outside the period of December through March. Construction activity may displace elk onto roads and other undesirable locations such as private property. If water or mineral (salt) are exposed as a result of expansion of the borrow pit it could also attract elk to the site. WDFW recommends actions to prevent the exposure of water or salt that would attract elk. If exposure does occur, the site should be protected from elk. Lastly, DOE should establish escape routes for elk in the event one falls into the pit.

**14** | Page 5.88, the last paragraph summarizes the ecological risk assessment completed for the aquatic and riparian biota for the Columbia River. WDFW considers this risk assessment invalid since there was no coordination between DOE and the Hanford Natural Resource Trustees, and that it failed to take into account other nonradionuclide chemicals. CERCLA § 104(b)(2) requires DOE to coordinate with the natural resource trustees regarding ecological risk assessment, as part of a CERCLA.

#### Appendix I. Mitigation

**15** | Page I.20, first paragraph. This section states the absence of immature sagebrush in Area C, is indicative of shrub steppe "not currently recovering", therefore replacement habitat is not indicated. WDFW disagrees with this assumption. The absence of immature sagebrush does not imply non-recovery. Many things like a high preponderance of exotic annual grasses and forbs are a much stronger indication of a non-recovering habitat. A better indicator of recovering would be the presence of a diverse perennial native grasses, forbs and shrub community adapted to the site (Benson, pers. comm.).

**16** | Page I.21-24, this section states, "disturbance of the needle- and-thread grass/cheatgrass

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16 community would be mitigated via the setting aside and protection of an element occurrence of the sagebrush/needle and thread grass community located away from Area C. Ample element occurrences of this community type (i.e. sagebrush/needle and thread grass community types) **currently** exists elsewhere in the 600 Area of the Hanford Site to satisfy this size constraint." According to the "Final Hanford Comprehensive Land-Use Plan Environmental Impact Assessment", much of these "element occurrences" are located in habitat designated as Conservation (mining). What measures will DOE prescribe in the interim to protect these habitats from future development, so they will have ecological value for mitigation options?

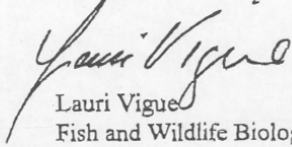
17 WDFW remains concerned over the lack of commitment from DOE for mitigation for the continued loss of shrub steppe habitat in the Low Level Burial Ground's (LLBGs) in the 200 Area West and East, due to the efforts of vegetation control (herbicide application) as indicated in section 5.5.1 and Appendix I. We disagree with the following statement, "...continued use of these LLBGs, or new disturbance of the extant plant communities within them via expansion of the disposal area, would not result in the loss of any State of Washington designated priority habitat". The WDFW mitigation policy goal is to maintain the functions and values of fish and wildlife habitat in the state, and we strive to **protect the productive capacity and opportunities reasonably expected of a site in the future**. In the long-term, WDFW shall seek a net gain in productive capacity of habitat through restoration, creation and enhancement. The EIS tends to rely excessively on the effects of the 24 Command Fire as a means to devalue habitat. Regardless of the condition of the shrub steppe habitat, it is still considered a WDFW priority habitat, and therefore compensatory mitigation is recommended, whether it is for total loss of habitat in the 200 Area or continued loss due to herbicide application.

18 WDFW disagrees with the statement "although new construction would result in temporary habitat loss in these areas, its loss would likely have no long-term effect on ecoregional biodiversity" (I.26). The cumulative impacts section within this EIS largely omits a thorough analysis of continued shrub steppe fragmentation in the Hanford area. The breakup of formerly contiguous habitats can have detrimental effects on species occurrence and population dynamics. Extensive surveys in Washington suggest that sage sparrows are most likely to occur in blocks of shrub-steppe >2,470 acres (Vander Hagen, pers. comm.). As remnant habitat becomes smaller and more fragmented, it is under greater influence of the surrounding landscape and more susceptible to external influences, be they predators, nest parasites, and potential competitors, or the wind-blown seeds of exotic species (Weins et al 1985).

The WDFW appreciates the opportunity to comment on this Draft Solid Waste EIS. If you have any specific questions regarding the comments I can be reached at (360) 902-2425.

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Sincerely,

  
Lauri Vigue  
Fish and Wildlife Biologist

Cc: Ted Clausen, Director, Region 3, Habitat Program  
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Melinda Brown, Ecology  
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**References**

Noss, R.F., E.T. LaRoe III, and J.M. Scott. 1995. Endangered ecosystems of the United States: a preliminary assessment of loss and degradation. Biological Report 28. U.S. National Biological Service, Washington D.C.

Saab, V.A. and T.D. Rich. 1997. Large-scale conservation assessment for Neotropical migratory land birds in the interior Columbia River Basin. General Technical Report PNW-GTR-399. U.S. Forest Service, Pacific Northwest Research Station, Portland, Or.

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**Personal Communications:**

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June 5, '03

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Dear Mr. Collins,

- 1 | I am writing to ask you and the Dept. of Energy not to  
2 | truck any more nuclear waste to Hanford, and not to bury  
waste in unlined trenches there.

Regarding radioactive waste being moved on highways, the fact that the procedure meets federal regulations is not reassuring to me. Accidents happen on freeways; purposeful destruction could also happen; and I know how slow traffic is through Portland at some times of day - i.e. how long someone could be stuck next to a truckload of trans-uranic waste. Then again, traffic could be moving at normal speed and still expose someone who, over the long-haul, is near the truck. I don't believe the federal regulations can guard against all these possibilities, and the risks are just too high to take.

- 3 | Instead of this plan, could the waste just be left at the  
various sites where it currently is? I'm supposing that those  
sites are contaminated and in need of clean-ups anyway; why not  
make it as safe as possible (vitrify it?) and clean up the sites,  
using money saved from not having to transport it?

- 4 | Then, about the unlined soil trenches; it's hard to believe

4 this is still being done, even for the short-term. It doesn't seem to be in line with DOE's promises to clean up Hanford. Apparently there is some provision in DOE's Solid Waste EIS revision to line these trenches by the end of this year; this seems like the very least that could be done.

Finally, it is absolutely imperative that the DOE stop producing any more nuclear waste, and require all other public and private producers of it to cease, NOW. There are no acceptable solutions for dealing with it. You, of all people, must know this best - what a headache we all give you any time you want to store it in / transport it through our area, or delay cleaning up where it has been stored, etc! Let's give ourselves a break and not make it any worse than it already is.

Yours in dealing with the mess,  
Janet van Fleet